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ABSTRACT

A system and a method of controlling transmitter power in a wireless communication system in which user data is processed as a multirate signal having a rate N(t) and in which the user data signal having rate N(t) is converted into a transmission data signal having a faster rate M(t) for transmission. The transmission power is adjusted on a relatively slow basis based on quality of data received by a receiver of the transmitted data. The transmitter power is determined as a function of N(t)/M(t) such that a change in the data rate in the multiple channels or the rate of the transmission data signal is compensated in advance of a quality of data based adjustment associated with such data rate change. Preferably, the user data signal having rate N(t) is converted into the transmission data signal having the faster rate M(t) by repeating selected data bits whereby the energy per bit to noise spectrum density ratio is increased in the transmission data signal.